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ABSTRACT

Background

Gastrointestinal disorders are the problems that most of the people suffer, a natural source ISABGOL is prefer to add in the diet to manage and relieve from this Gastrointestinal difficulty. Among the significant benefits some other important factors that may be a reason to take it in daily routine is aim to get fit, prevention from getting extra fat, indigestion, heartburn or sometimes for feeling lighter. Several studies have been made to justify the appropriateness of husk related to human health.

Aims & Objective

The therapeutically active, gel-forming substance of the alkali-extractable polysaccharides (complex carbohydrates) of Plantago ovate; husk (psyllium seed) is found to be an effective remedy to cure acute condition of GI disturbances. It is also effective in the management of chronic condition of gastric ulcers and constipation. This study was conducted to determine the effect of psyllium husk on the abnormal conditions of GI and for these 20 individuals is randomly selected.

Method

A questionnaire was designed with 15-20 questions relevant to study was asked. Statistical tools were applied after this, by using SPSS for descriptive analysis

Result & Conclusion

All the volunteers found the positive results regarding ispaghol effectiveness. Most of the individuals that have swallowing problem while taking it orally with water, with curd or with juice. So hence it has been concluded that most of the volunteers used it for the treatment of constipation, fewer were used it for the treatment of diarrhea and very rare population were used it for the obesity prevention and management.

INTRODUCTION

Ispaghol is a member of plant family PLANTAGO whose seeds are intended for mucilage production. Mainly it is used as a dietary fiber; husk is rich in both soluble and insoluble fiber and natural laxatives, which makes it an effective remedy for constipation. It swells in the stomach on consumption and helps push its contents out of the body. By having hygroscopic property, it absorbs water from the gastrointestinal tract, improves consistency of stools, and hence relieving constipation. When taken husk it forms a protective lining around the stomach, prevents from corrosion, and provide relieve from acidity. (4)

The seeds of psyllium, which are small herbaceous plants, are highly beneficial, as they turned into mucilage, when taken orally. Psyllium is a natural dietary fiber, and while many people think of it as a pure laxative. The mucilage comes from its coat and it is gelatinous in nature. It swells 10 times when has been in contact with water. (4)

Some of the clinical or medicinal significance and harmful effects are discussed below:

CLINICAL AND MEDICINAL SIGNIFICANCE

1. INVINCIBILITY EFFECT ON CHOLESTEROL

Psyllium directly effects on cholesterol levels by lowering the level of LDL, Triglycerides and VLDL. Studies have conducted to show that psyllium can lower total, as well as bad cholesterol levels that is LDL, which may help risk reduction of cardiac diseases. In combination with lipids-lowering drugs, such as statins, psyllium provides an added beneficial effect to reducing cholesterol levels.

2. LOWERING BLOOD PRESSURE

While added psyllium in daily routine, it may reduce blood pressure. Many studies have conducted to show this effect and concluded that it has a great effect on systolic as well as diastolic pressure.

3. HELPS IN THE TREATMENT OF IBD & IBS

In some research studies, psyllium is recommended for mild-to-moderate cases of diarrhea or either ulcerative colitis or Crohn disease. In some trial, volunteer patients taken with ulcerative colitis, and they were given psyllium in their diet and conclude its effectiveness as the prescription drug in maintaining remission of IBD. Several studies have also concluded that psyllium helps relieve some symptoms of IBS, such as diarrhea and constipation.

4. HELPS IN DETOXIFY OBESITY

The best thing about dietary fiber is that many people take it for weight loss issues it creates the feeling of fullness of stomach, is very important for people looking to cut down on their weight. By preventing between-meal snacking, psyllium supplements can keep energy levels up without adding on the pounds. Some dietary product such as Oat bran, wheat often contains psyllium, and is a popular choice as healthy snacks.

5. HELPS TO TREAT CONSTIPATION

Isabghol is used to treat constipation. It increases the bulk in stool and softens it, an effect that helps to cause increase in the movement of intestines. (3), (5)

SIDE EFFECTS OF PSYLLIUM

People that take psyllium in their diets usually do not have a side effect that leads to severity. But in rare some undergoes by the adverse conditions like; chocking, chest pain, vomiting, difficulty swallowing, joints pain.

They are not the complete signs of adverse effects, if some other worse situation occurs so consultation should be taken by physician, pharmacist or other healthcare provider. Allergic events can also be occurring but it is very rare. (6)

RECOMMENDED DOSE OF PSYLLIUM

According to web med, directions are recommended for the use of ispaghol

Consume medication by mouth as directed by doctor. If you are self-treating, follow all directions on the product package. If you are uncertain about any of the information, ask your doctor or pharmacist. To prevent choking from this medication, take it with a full glass of water or other liquid (8 ounces/240 milliliters). If you are taking the wafers, chew them thoroughly before swallowing. For powder forms of this medication, measure each dose according to the directions on the product label. Mix in a full glass of water or other liquid (8 ounces/240 milliliters), stir completely, and drink right away. You may add more liquid to the mixture if it becomes too thick. (8)

METHOD

For checking the effectiveness and therapeutic uses of ispaghol regarding constipation and obesity, a short observational study was performed by designing a questionnaire containing discrete based data related to daily routine ispaghol use. The theme of survey was to check the effectiveness of psyllium in the treatment of obesity constipation and gastrointestinal problems and also the improvement in these problems. For this, a small number of populations were selected; volunteers are of the age in the range of 20 to 50. We have applied SPSS descriptive analysis in our data to interrelate the results. Shown in Table 1.1 Descriptive Statistics.

RESULT & DISCUSSION OF STUDY

We have performed the descriptive analysis of our data by using statistical tool that is SPSS, descriptive statistics in which we calculate minimum and maximum ranges, statistics, and standard deviations and total mean.

We discussed some studies that performed in past years, proven the therapeutics and comparison of effects in different subjects' population. Some of the referred and authentic sites are also enlighten the brief significance of psyllium.

In July 2009, Scandinavian Journal of Gastroenterology published a study that was conducted for 4 months' trial period to evaluate the effectiveness of husk in treating GI troubles. The observations highlight that husk can be helpful in the management of gastrointestinal manifestation in ulcerative colitis. (1)

In August 2008, A Multi-centre, General Practice Comparison of Husk was conducted with Lactulose and Other Laxatives for the Treatment of Simple Constipation. This Multi-centre study in general practice compared the efficacy, speed of action and acceptability of husk (Fybogel Orange®, Reckitt d Colman Products, UK) for up to 4 weeks and enrolled 394 patients in which 56.9% patients were treated by husk and 43.1% patients were treated with lactulose. At 4th week treatment, it was concluded that husk's results were superior to lactulose. (2)

Another study was conducted by A. Kumar et al to check the Optimum dosage of husk in patients with Irritable Bowel Syndrome (IBS). Correlation was analyzed between symptom relief with whole gut transit-time and stool weight. The study was split into parts by providing differentiated doses that were 10g, 20g, and 30g respectively. In the end, they concluded that the effective dose of husk is 20g and 30g to stabilize and manage IBS as well as whole gut transit time. (3)

In 1988 a study was published in Journal of the American Dietetic Association performed by Steve and Robertson. They compare the effects of psyllium and wheat bran on gastrointestinal

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transit time and stool characteristics. They selected 12 subjects who were given fiber supplements containing wheat bran, psyllium gum, a combination of wheat bran and psyllium gum, or a low-fiber control for 2 weeks. Gastrointestinal transit time was measured, and the wet weight and dry weight of stools were measured, and also the consistency of their stools. Fiber supplementation decreased transit time and increased the daily number of defecations. Bran had a greater effect on transit time than fiber. Psyllium had a greater effect on the amount of water found in the stools and the total stool weight. (10)

EverydayHealth.com and OrganicFacts.com provides vast knowledge on the uses and benefits of psyllium and concise it for the ease of non-medical profession people for their understanding. Benefits of psyllium that are added in introduction are referred with this site.

Ayurtimes; the Indian site also showing the importance of psyllium and different ways to use it effectively and also give the brief botanical classification for educational purpose that shown in this paper on Table 1.2

Recommended doses of psyllium are referred from web med in which we are directing the use of ispaghol and cautionary measures.

CONCLUSION

The theme of survey was to analyze the effectiveness of psyllium in treating the gastrointestinal problem such as constipation, obesity and diarrhea. It has been concluded that most of the volunteers used it for the treatment of constipation, fewer were used it for the treatment of diarrhea and very rare population were used it for the obesity prevention and management. All the volunteers found the positive results regarding ispaghol effectiveness. Most of the people that have swallowing problem while taking it orally with water, with curd or with juice. Ispaghol is preferred to add in the diet to manage and relieve from gastrointestinal difficulties. Among the significant benefits it is widely use in adolescents and elderly population. Isaghol has natural laxative properties. It is full of fiber. It expands in the digestive tract. Its gelatin base helps in natural bowel movement. While taking this don't over consume. Take it as you needed. Always take it after soaking it in liquid otherwise, it may cause choking. In some cases, stomach cramping may occur in this scenario consult your doctor and stop using it. Though allergic reactions are almost rare if you face any, seek doctor's advice without delay. If you have a medical history of appendicitis, stomach blockage doesn't take this without consulting your doctor. (9)

In study 80% females and 20% males are enrolled (fig 1.3), conditions that from they are suffering is 50% from constipation, 40% of diarrhea, 5% of other problems and 5% don't suffer from any of them (fig 1.4), and 60% of people suffer recently, 20% of them suffer from less than 1 year, and 20% of them suffer from more than 1 year (fig 1.5), 50% of the population have family history while 50% do not have any sort of history (fig 1.6),95% of people do not smoke and 5% of them smoking (fig 1.7), 50% of the people are using medication for treating

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GI problems and 50% of them are not using any medicine (fig 1.8),95% of people hear about ispaghol from their family while 2.5% of them hear from friends and doctor respectively (fig 1.9). 80% of population use ispaghol but not regularly while 10% of them are using daily and 10% are using when necessary (fig 1.10).100% are satisfied from the effectiveness of ispaghol (fig 1.11). 70% of the people take ispaghol with water while 20% of them take it with curd and 10% with juice (fig 1.12). 80% people agreed that it can be use for the treatment of obesity while 20% refused (fig 1.13).70% population take it once a day while 25% taking it when necessary and 15% of them taken twice a day (fig 1.14). 98% of the population is agreed to the effectiveness of constipation while 2% refused (fig 1.15).70% of the population agree that psyllium is effective in treating acidity while 30% refused (fig 1.16).50% of the population does not feel any difficulty in swallowing while 45% felt it and 5% of them suffered from joint pain after taking ispaghol (fig 1.17).

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Table 1.1 Descriptive Statistics

Descriptive Statistics									
	N	Range	Minimu m	Maximu m	Sum	Mea	ın	Std. Deviatio	Varianc e
	Statisti c	Statisti c	Statistic	Statistic	Statisti c	Statisti c	Std. Error	Statistic	Statistic
What is your gender?	20	1	1	2	37	1.85	.08	.366	.134
Do you have any condition that you are aware of?	20	3	1	4	33	1.65	.18 2	.813	.661
For how long have you been suffering from this condition?	20	3	0	3	29	1.45	.18 5	.826	.682
Have any family member had this problem that you mentioned above?	20	1	1	2	30	1.50	.11 5	.513	.263
Do you smoke?	20	1	1	2	39	1.95	.05 0	.224	.050
Do you face any difficulty after taking ispaghol?	20	2	1	3	39	1.95	.22	.999	.997
Do you use any medicine for this problem?	20	1	2	3	50	2.50	.11 5	.513	.263

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Where did you first hear about ispaghol?	20	2	1	3	40	2.00	.07	.324	.105
Do you get relief from acidity?	20	1	1	2	27	1.35	.10 9	.489	.239
Do you agree that ispaghol is use for weight loss?	20	1	1	2	24	1.20	.09	.410	.168
Is ispaghol effective in treating constipation ?	20	1	1	2	21	1.05	.05 0	.224	.050
How many times do you take ispaghol?	20	2	1	3	32	1.60	.19 7	.883	.779
Do you use ispaghol for the condition you mentioned above?	20	2	1	3	38	1.90	.12 4	.553	.305
How do you take ispaghol?	20	2	1	3	30	1.50	.17 0	.761	.579
Do you feel better after using ispaghol?	20	0	1	1	20	1.00	.00	.000	.000
Valid N (list wise)	20								

Table 1.2 botanical classification of psyllium

Medicine	Herb
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Indication	Constipation
Potential Action	Bulk-forming laxative
Chemical Composition	Fiber 75-80%
Dosage	10 to 30 grams
Scientific Name	Plantago
Plant Family	Plantaginaceae

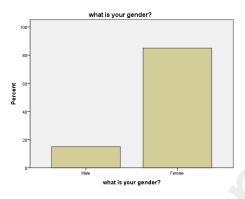


Figure 1.3 Genders

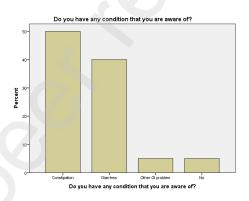


Figure 1.4 Awareness of condition

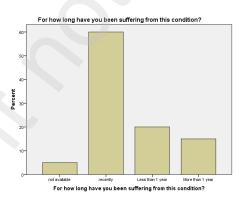


Figure 1.5 Duration of suffering



Figure 1.6 Family Histories

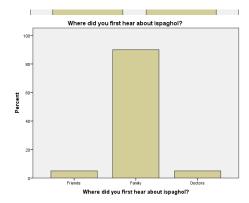


Figure 1.9 first hear about ispaghol

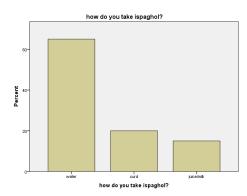


Figure 1.12 how do you take ispaghol?

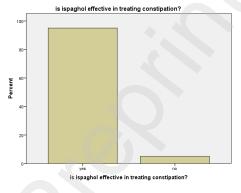


Figure 1.15 is ispaghol effective in treating constipation?



Figure 1.7 smoking

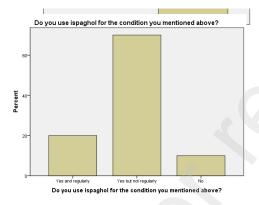


Figure 1.10 do you use ispaghol to treat



Figure 1.13 do you agree that ispaghol is effective in weight loss?

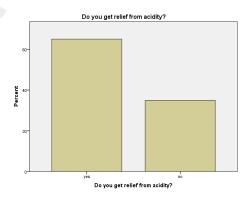


Figure 1.16 do you get relief from acidity?



Figure 1.8 medications use for constipation

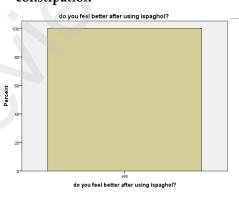


Figure 1.11 Do you feel better?

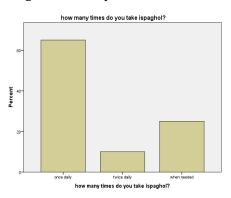


Figure 1.14 how many times do you take ispaghol?

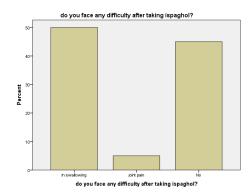


Figure 1.17 do you face any difficulty after taking ispaghol?

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